Journal of Cellular Biochemistry

Executive Editors

C. Fred Fox

Gary S. Stein

Max M. Burger

Volume 73, 1999

WILEY-LISS

A JOHN WILEY & SONS, INC., PUBLICATION

New York • Chichester • Brisbane • Toronto • Singapore

© 1999 Wiley-Liss, Inc.
605 Third Avenue
New York, NY 10158

Volume 73 • Number 1 • April 1, 1999

PROSPECT

New Insights into the Mechanisms of Nuclear Segmentation in Human Neutrophils
J. Aquiles Sanchez and Lawrence J. Wangh 1

ARTICLES

Effect of $1,25(OH)_2D_3$ on Bone Morphogenetic Protein-3 mRNA Expression
C. Faucheux, R. Bareille, J. Amédée, and J.T. Triffitt 11

CD44 Is Not an Adhesive Receptor for Osteopontin
Laura L. Smith, Brad W. Greenfield, Alejandro Aruffo, and Cecilia M. Giachelli 20

In Vivo and In Vitro Association of 14–3-3 Epsilon Isoform With Calmodulin: Implication for Signal Transduction and Cell Proliferation
Sharon C.W. Luk, Sai-ming Ngai, Stephen K.W. Tsui, Kwok-pui Fung, Cheuk-yu Lee, and Mary M.Y. Waye 31

Prostaglandin E_2 Stimulates the Formation of Mineralized Bone Nodules by a cAMP-Independent Mechanism in the Culture of Adult Rat Calvarial Osteoblasts
Hiroyuki Kaneki, Ikuko Takasugi, Masaki Fujieda, Michiaki Kiriu, Shigeki Mizuochi, and Hayao Ide 36

Identification of Epithelial and Myeloid-Specific DNA Elements Regulating MRP14 Gene Transcription
Martin Klempt, Harutyun Melkonyan, Heiko A. Hofmann, and Clemens Sorg 49

Regulatory Domain of Human Heat Shock Transcription Factor-2 Is Not Regulated by Hemin or Heat Shock
Zhen Zhu and Nahid F. Mivechi 56

Peroxisome Targeting of Porcine 17β-Hydroxysteroid Dehydrogenase Type IV/D-Specific Multifunctional Protein 2 Is Mediated by its C-Terminal Tripeptide AKI
G. Möller, J. Lüders, M. Markus, B. Husen, P.P. Van Veldhoven, and J. Adamski 70

Characterization of Caspase Proteases in Cytokine-Dependent Myeloid Progenitor Cells Using Enzyme Affinity Labeling
Richard L. Cho and Daniel E. Johnson 79

Inactivation of MED-1 Elements in the TATA-less, Initiator-less Mouse Thymidylate Synthase Promoter Has No Effect on Promoter Strength or the Complex Pattern of Transcriptional Start Sites
Thomas L. Rudge and Lee F. Johnson 90

Differentiation and Apoptosis of Neuroblastoma Cells: Role of N-myc Gene Product
Umberto Galderisi, Giovanni Di Bernardo, Marilena Cipollaro, Gianfranco Peluso, Antonino Cascino, Roberto Cotrufo, and Mariarosa A.B. Melone 97

1α,25-Dihydroxy-3-Epi-Vitamin D_3, a Natural Metabolite of 1α,25-Dihydroxyvitamin D_3, Is a Potent Suppressor of Parathyroid Hormone Secretion
A.J. Brown, C. Ritter, E. Slatopolsky, K.R. Muralidharan, W.H. Okamura, and G.S. Reddy 106

Transient Upregulation of CBFA1 in Response to Bone Morphogenetic Protein-2 and Transforming Growth Factor β1 in C2C12 Myogenic Cells Coincides With Suppression of the Myogenic Phenotype but is Not Sufficient for Osteoblast Differentiation
Mi-Hye Lee, Amjad Javed, Hyun-Jung Kim, Hong-In Shin, Soraya Gutierrez, Je-Yong Choi, Vicky Rosen, Janet L. Stein, André J. van Wijnen, Gary S. Stein, Jane B. Lian, and Hyun-Mo Ryoo 114

Dual Reporter Systems in Yeast and Mammalian Cells for Assessing Progesterone Receptor Modulators
Bärbel Rudakoff, Katrin Undisz, Gerd Mayer, Lothar Sobek, Günter Kaufmann, Ralf Thiericke, Susanne Grabley, and Thomas Munder 126

Effects of Estradiol on Aldosterone Secretion in Ovariectomized Rats
Mei-Mei Kau, Ming-Jae Lo, Shiow-Chwen Tsai, Jiann-Jong Chen, Chien-Chen Lu, Ho Lin, Shyi-Wu Wang, and Paulus S. Wang 137

Volume 73 • Number 2 • May 1, 1999

FAST TRACK

Chimeric Papillomavirus Virus-like Particles Induce a Murine Self-Antigen-Specific Protective and Therapeutic Antitumor Immune Response
John D. Nieland, Diane M. Da Silva, Markwin P. Velders, Karin E. de Visser, John T. Schiller, Martin Müller, and W. Martin Kast 145

Identification of a Type 6 Protein Ser/Thr Phosphatase Regulated by Interleukin-2 Stimulation
Mohammed Filali, Shiyong Li, Ha Won Kim, Brian Wadzinski, and Malek Kamoun 153

Notch-1 Inhibits Apoptosis in Murine Erythroleukemia Cells and Is Necessary for Differentiation Induced by Hybrid Polar Compounds
Leslie L. Shelly, Chana Fuchs, and Lucio Miele 164

ARTICLES

Analysis of the Capacity of Extracts From Normal Human Young and Senescent Fibroblasts to Support DNA Synthesis In Vitro
W.R. Pendergrass, M. Gray, M.S. Wold, P. Luo, and T.H. Norwood 176

Purification of a Polynucleotide Kinase From Calf Thymus, Comparison of Its 3′-Phosphatase Domain With T4 Polynucleotide Kinase, and Investigation of Its Effect on DNA Replication In Vitro
Arshad Jilani, Carolyn Slack, Diamanto Matheos, Maria Zannis-Hadjopoulos, and Dana D. Lasko 188

Opioid Agonists Modify Breast Cancer Cell Proliferation by Blocking Cells to the G_2/M Phase of the Cycle: Involvement of Cytoskeletal Elements
Simone Panagiotou, Efstathia Bakogeorgou, Evangelia Papakonstanti, Anastassia Hatzoglou, France Wallet, Christophe Dussert, Christos Stournaras, Pierre-Marie Martin, and Elias Castanas 204

EMF Induces Differentiation in HL-60 Cells
Q. Tao and A. Henderson 212

Modulation of Neutral Matrix Metalloproteinases of Involuting Rat Mammary Gland by Different Cations and Glycosaminoglycans
M. Ambili and P.R. Sudhakaran 218

UV Irradiation Upregulates Egr-1 Expression at Transcription Level
Ruo-Pan Huang, Yan Fan, and Alton L. Boynton 227

Constitutive RelB Activation in v-Src-Transformed Fibroblasts: Requirement for IκB Degradation
Kenneth H. Shain, Richard Jove, and Nancy E. Olashaw 237

Cell Surface Colligin/Hsp47 Associates With Tetraspanin Protein CD9 in Epidermoid Carcinoma Cell Lines
Carla Hebert, Kathleen Norris, Ricardo Della Coletta, Mark Reynolds, José Ordóñez, and John J. Sauk 248

Thiol Redox Modulation of Doxorubicin Mediated Cytotoxicity in Cultured AIDS-Related Kaposi's Sarcoma Cells
Susan R. Mallery, Ying Mei Clark, Gregory M. Ness, Omar M. Minshawi, Ping Pei, and Charlene M. Hohl 259

Evidence for Ligand-independent Homo-Oligomerization of Leptin Receptor (OB-R) Isoforms: A Proposed Mechanism Permitting Productive Long-Form Signaling in the Presence of Excess Short-Form Expression
David W. White and Louis A. Tartaglia 278

Erratum 289

Volume 73 • Number 3 • June 1, 1999

ARTICLES

Both Sp1 and Sp3 Are Responsible for $p21^{waf1}$ Promoter Activity Induced by Histone Deacetylase Inhibitor in NIH3T3 Cells
Hengyi Xiao, Tadao Hasegawa, and Ken-ichi Isobe 291

Complement-Derived Anaphylatoxin C5a Protects Against Glutamate-Mediated Neurotoxicity
Hiroshi Osaka, Piali Mukherjee, Paul S. Aisen, and Guilio Maria Pasinetti 303

Palmitoyl Ascorbate: Selective Augmentation of Procollagen mRNA Expression Compared With L-Ascorbate in Human Intestinal Smooth Muscle Cells
Gennady Rosenblat, Amy Willey, Ya-Nan Zhu, Adi Jonas, Robert F. Diegelmann, Ishak Neeman, and Martin F. Graham 312

Extracellular Matrix Inhibits Apoptosis and Enhances Endothelial Cell Differentiation by a NFκB-Dependent Mechanism
Wengong Wang and Antonino Passaniti 321

Enhancement of Neutral Phosphatase Activity in the Cytosol and Nuclei of Regenerating Rat Liver: Role of Endogenous Regucalcin
Masami Omura and Masayoshi Yamaguchi 332

Influence of Different Metal Ions on the Ultrastructure, Biochemical Properties, and Protein Localization of the K562 Cell Nuclear Matrix
Luca M. Neri, Roberta Bortul, Marina Zweyer, Giovanna Tabellini, Paola Borgatti, Marco Marchisio, Renato Bareggi, Silvano Capitani, and Alberto M. Martelli 342

Transcription Regulatory Elements of the First Intron Control Human Transglutaminase Type I Gene Expression in Epidermal Keratinocytes
Renata R. Polakowska, B.A. Graf, V. Falciano, and P. LaCelle 355

Transformation by Oncogenic Ras-p21 Alters the Processing and Subcellular Localization of the Lysosomal Protease Cathepsin D
Marina Démoz, Roberta Castino, Antonella Dragonetti, Elisabetta Raiteri, Francesco M. Baccino, and Ciro Isidoro 370

Recombinant TGF-β1 Stimulates Bone Marrow Osteoprogenitor Cell Activity and Bone Matrix Synthesis in Osteopenic, Old Male Mice
Dan Gazit, Yoram Zilberman, Gadi Turgeman, Shuanhu Zhou, and Arnold Kahn 379

Human $p120^{ctn}$ Catenin: Tissue-Specific Expression of Isoforms and Molecular Interactions With BP180/Type XVII Collagen
Sirpa Aho, Kyle Rothenberger, and Jouni Uitto 390

Characterization of an Enhancer Required for 1,25-dihydroxyvitamin D_3-Dependent Transactivation of the Rat Osteocalcin Gene
W. Bruce Sneddon and Marie B. Demay 400

Species Differences in cis-Elements of the Proα1(I) Procollagen Promoter and Their Binding Proteins
Beverly Peterkofsky, Anna Gosiewska, Kamal Singh, Stacey Pearlman, and Fatemeh Mahmoodian 408

UV Inducibility of Rat Proliferating Cell Nuclear Antigen Gene Promoter
Hsueh-Wei Chang, Yi-Chyi Lai, Ching-Yang Cheng, Jih-Lin Ho, Sheue-Ting Ding, and Yin-Chang Liu 423

Volume 73 • Number 4 • June 15, 1999

VIEWPOINT

Simple Preparation Method of PCR Fragments for Automated DNA Sequencing
Estrid Høgdall, Kit Boye, and Jens Vuust 433

ARTICLES

Noggin Expression in a Mesodermal Pluripotent Cell Line C1 and Its Regulation by BMP
Akira Nifuji, Odile Kellermann, and Masaki Noda 437

Promotion of Chondrocyte Proliferation by Versican Mediated by G1 Domain and EGF-like Motifs
Yaou Zhang, Liu Cao, Chris Kiani, Bing L. Yang, Wendy Hu, and Burton B. Yang 445

Effects of Serum on Calcium Mobilization in the Submandibular Cell Line A253
Xiuhua Sun, Ann-Christin Mörk, R.J. Helmke, J. Ricardo Martinez, and Guo H. Zhang 458

G Protein $G\alpha_{q/11}$ and $G\alpha_{i1,2}$ Are Activated by Pancreastatin Receptors in Rat Liver: Studies With GTP-γ^{35}S and Azido-GTP-α-^{32}P
José Santos-Álvarez and Víctor Sánchez-Margalet 469

Nitric Oxide Regulation of cGMP Production in Osteoclasts
Sai-Sai Dong, John P. Williams, S. Elizabeth Jordan, Trudy Cornwell, and Harry C. Blair 478

Regulation of Plasma Membrane Blebbing by the Cytoskeleton
Jörg Hagmann, Max M. Burger, and Daniel Dagan 488

Comparative Effects of Estrogen and Antiestrogens on Differentiation of Osteoblasts in Mouse Bone Marrow Culture
Qiang Qu, Pirkko L. Härkönen, and H. Kalervo Väänänen 500

Arterial Shear Stress Stimulates Surface Expression of the Endothelial Glycoprotein Ib Complex
Dorothy A. Beacham, Jie Lian, Guoxin Wu, Barbara A. Konkle, Laural B. Ludlow, and Sandor S. Shapiro 508

Characteristics of EGFR Family-Mediated HRG Signals in Human Ovarian Cancer
Manuela Campiglio, Suhad Ali, Piotr G. Knyazev, and Axel Ullrich 522

Malignant Astrocytoma Cell Attachment and Migration to Various Matrix Proteins Is Differentially Sensitive to Phosphoinositide 3-OH Kinase Inhibitors
Junxiu Ling, Zhiyong Liu, Dongyan Wang, and Candece L. Gladson 533

Mitochondrial DNA Deletions Are Associated With Ischemia and Aging in Balb/c Mouse Brain
Zhaohui Zeng, Zongyu Zhang, Hongsheng Yu, Michael J. Corbley, Zuoqin Tang, and Tanjun Tong 545

Regulation of Thyroid Hormones on the Production of Testosterone in Rats
Yu-Chung Chiao, Hsien-Yang Lee, Shyi-Wu Wang, Jiuan-Jiuan Hwang, Chau-Heng Chien, Seng-Wong Huang, Chien-Chen Lu, Jiann-Jong Chen, Shiow-Chwen Tsai, and Paulus S. Wang 554

Direct Effects of Prolactin on Corticosterone Release by Zona Fasciculata-Reticularis Cells From Male Rats
Ling-Ling Chang, Ming-Jae Lo, Shu-Fen Kan, William Ji-Sien Huang, Jiann-Jong Chen, Mei-Mei Kau, Jui-Ling Wang, Ho Lin, Shiow-Chwen Tsai, Yu-Chung Chiao, Jiun-Yih Yeh, Wan-Song Alfred Wun, and Paulus S. Wang 563